

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Application Review

Issue Date: xx/xx/2018

Region: Raleigh Regional Office
County: Johnston
NC Facility ID: 5100159
Inspector's Name: Matthew Mahler
Date of Last Inspection: 03/28/2017
Compliance Code: 3 / Compliance - inspection

Facility Data Applicant (Facility's Name): Structural Coatings Inc. - Clayton Facility Address: Structural Coatings Inc. - Clayton 8029 US Highway 70 West Clayton, NC 27520 SIC: 3441 / Fabricated Structural Metal NAICS: 332312 / Fabricated Structural Metal Manufacturing Facility Classification: Before: Title V After: Fee Classification: Before: Title V After:				Permit Applicability (this application only) SIP: 15A NCAC 2D .0515, 2D .0521, 2D .0541, 2D .1100, 2D .1111, 2D .1806, 2Q .0512, 2Q .0705 & 40 CFR §81.334 NSPS: NA NESHAP: MACT Subpart M PSD: NA PSD Avoidance: NA NC Toxics: 2D .1100 112(r): NA Other: NA			
Contact Data				Application Data			
Facility Contact John Dabinett Environmental Engineer (919) 553-3034 8029 Highway 70 West Clayton, NC 27520	Authorized Contact Edwin Ray Hales President (919) 553-3034 8029 US Highway 70 W Clayton, NC 27520	Technical Contact John Dabinett Environmental Engineer (919) 553-3034 8029 Highway 70 West Clayton, NC 27520	Application Number: 5100159.17A Date Received: 04/03/2017 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 07357/T06 Existing Permit Issue Date: 03/13/2013 Existing Permit Expiration Date: 02/28/2018				
Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2016	---	---	19.78	---	4.90	9.23	7.10 [Xylene (mixed isomers)]
2015	---	---	17.08	---	3.80	8.61	6.80 [Xylene (mixed isomers)]
2014	---	---	14.26	---	2.80	5.26	3.90 [Xylene (mixed isomers)]
2013	---	---	27.40	---	2.10	11.38	8.97 [Xylene (mixed isomers)]
2012	---	---	30.44	---	3.40	15.73	12.82 [Xylene (mixed isomers)]
Review Engineer: Gautam Patnaik Review Engineer's Signature: _____ Date: xx/xx/2018				Comments / Recommendations: Issue: 07357/T07 Permit Issue Date: xx/xx/2018 Permit Expiration Date: xx/xx/2023			

I. Facility Description

As per the Regional Office report the facility “cleans and finishes structural steel members such as bridge I-beams and escalator casings. The steel is cleaned using sandblasting operations and coated through painting or metalizing (application of a thin layer of molten metal) operations.”

The facility does liquid applied coatings and metalizing for application of industrial coatings for valves and strainers, sheet pile and H-pile and miscellaneous steel fixtures and structures including fabrication.

Metalizing or thermal spray is a generic term for a group of coating processes used to apply metallic or nonmetallic coatings. Energy sources are used to heat coating materials to a molten or semi-molten state. The resultant heated particles are propelled (accelerated) toward a prepared surface. Upon impact, a bond is formed with the surface, with subsequent particles causing thickness buildup and then are cooled with a very high cooling rate. The facility uses this metalizing process to coat steel and concrete substrates with zinc or aluminum or a combination of the two metals to create a cathodic protection coating on a substrate.

II. Purpose of Application

This facility currently operates under Air Quality Permit No. 07357T06 issued on March 13, 2013 which expired on February 28, 2018.

However, as per 15A NCAC 02Q .0513 (b) “Permit expiration terminates the facility's right to operate unless a complete renewal application has been submitted at least nine months before the date of permit expiration.” This application was received on 04/03/2017 or at least nine months before the expiration date of the current permit. The application was considered complete on that date.

Therefore, as per 15A NCAC 02Q .0513 (c) “the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.”

III. Application Chronology

Since the last permit renewal (Air Quality Permit No. 07357T06) was issued on March 13, 2013, there have been no changes to the permit for this facility.

IV. Regulatory Review

The facility currently complies with the following regulations as follows:

- 1) 15A NCAC 2D .0515: “Particulates from Miscellaneous Industrial Processes”

The following sources are subject to the above regulation:

- A. Painting operations (ID Nos. ES-PO1 and ES-PO2) with associated panel filters (ID Nos. CD-PF-1 and CD-PF-2) and

- B. Metalizing operations (ID Nos. ES-MO1 and ES-MO2) with associated panel filter (ID No. CD-PF-3)

There have been no changes to the processing rates and emissions rates for the above sources. The regulatory requirement language has been updated where required to the latest version being used by DAQ.

The applicant also requested that the weekly inspection of the filters for source “Metalizing operations (ID Nos. ES-MO1 and ES-MO2) with associated panel filter (ID No. CD-PF-3)” be changed to monthly and this has been approved (Section 2.1 B. 1. c. i., of the revised permit). The Regional Office also agreed to this change.

2) 15A NCAC 2D .0521: “Control of Visible Emissions”

The following sources are subject to the above regulation:

- A. Painting operations (ID Nos. ES-PO1 and ES-PO2) with associated panel filters (ID Nos. CD-PF-1 and CD-PF-2);
- B. Metalizing operations (ID Nos. ES-MO1 and ES-MO2) with associated panel filter (ID No. CD-PF-3) and
- C. Outdoor sandblasting operation (ID No. ES-OSBO)

There have been changes to the emissions standards for the above sources. The regulatory requirement language has been updated where required to the latest version being used by DAQ.

- 3) 15A NCAC 2D .0541: “Control of Emissions from Abrasive Blasting;”
- 4) 15A NCAC 2D .1100: “Control of Toxic Air Pollutants;”
- 5) 15A NCAC 2D .1111: “Maximum Achievable Control Technology (40 CFR 63, Subpart MMM);”
- 6) 15A NCAC 2D .1806: “Control and Prohibition of Odorous Emissions;”
- 7) 15A NCAC 2Q .0512: “Permit Shield and Application Shield;” and

Sources at this facility are subject to the above regulations. There have been no changes made to the requirements of these regulations.

8) 15A NCAC 2Q .0705: “Existing Facilities and SIC Calls”

The permit for this facility still has the above regulation which requires emissions of toxic air pollutants (excluding those sources exempt under 15A NCAC 2Q .0702 "Exemptions") to have demonstrated compliance with 15A NCAC 2D .1100.

This regulation has been repealed since May 1, 2014. Also, as per application review for applications # 5100159.12A and 5100159.07A the facility has demonstrated compliance on a facility-wide basis. Thus, this regulation is removed from the modified permit.

9) 15A NCAC 2D .0958: “Work Practices for Sources of Volatile Organic Compounds”

Effective November 1, 2016, 15A NCAC 02D .0958 is applicable only to following counties/areas in NC: Cabarrus County; Gaston County; Lincoln County; Mecklenburg County; Rowan County; Union County; and Davidson Township and Coddle Creek Township in Iredell County. Since this facility is located in Johnston County this regulation is removed from the permit.

V. NSPS, NESHAPS/MACT, PSD, Attainment Status, 112(r), Air Toxics & House Bill 952, CAM and Compliance Status:

NSPS

The applicant is not currently subject to any New Source Performance Standards. This permit renewal does not affect this status.

NESHAPS/MACT

The applicant is classified as a major source of HAPs emissions subject to the MACT standards for Surface Coating of Miscellaneous Metal Parts (4 CFR 63, Subpart Mmmm).

PSD

The facility is not currently subject to any Prevention of Significant Deterioration requirements. This permit renewal does not affect this status.

112(r)

The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule. This permit renewal does not affect this status.

CAM

40 CFR § 64 requires that a continuous compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold, and use a control device to meet an applicable standard. The following equipment/control device relationships exist:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-PO1 (MACT, Subpart Mmmm)	Painting operation	CD-PF-1	Panel filter (80 square feet of filter area)
ES-PO2 (MACT, Subpart Mmmm)	Painting operation	CD-PF-2	Panel filter (80 square feet of filter area)
ES-MO1 ES-MO2	Two metalizing operations	CD-PF-3	Panel filter (80 square feet of filter area)

During the permit review for Permit No. 07357R03, CAM was determined not to be applicable to any of the above sources. There have been no additional emission source/control devices added since this last CAM applicability determination.

NC Air Toxics & House Bill 952

The facility is considered a “Major Source” of Hazardous Air Pollutants (HAPs) emissions and is subject to the MACT Subpart M.

On June, 2012, the North Carolina Senate Agriculture, Environment, and Natural Resources Committee unanimously approved House Bill 952 – State Air Toxics Program Reform. The purpose of the bill was to exempt from State air toxics emission controls those sources of emissions that are subject to certain federal emission requirements, to direct the Department of Environment and Natural Resources to require permit conditions that eliminate unacceptable risks to human health, to direct the Division of Air Quality to review the State Air Toxics Program, and to require reports on the implementation of the act.

Specifically, affected sources under 40 CFR Part 63 or subject to a case-by-case maximum achievable control technology {under 112(j)} permit requirement issued by NC DAQ are exempt from the toxics rule.

The State rule 15A NCAC 2D .1100 “Control of Toxic Air Pollutant Emissions” outlines the procedures that must be followed if modeling is required under NCAC 2Q .0700. Based upon the above legislative action sources subject to 40 CFR Part 61 or Part 63 are exempted from the North Carolina Air Toxics program. Sources that are subject to a MACT, GACT, or 112(j) requirements would be exempt from the NC Air Toxics program and the associated modeling requirements.

During the processing of Application # 5100159.07A, the facility Toxics Air Pollutants (TAPs) were in compliance with the AALs (acceptable ambient level) concentration. This permit renewal does not affect this status and will not pose an acceptable risk to human health.

The report for the latest inspection done on 03/28/2017 states “provided electronic records demonstrate that the TPER’s have not been exceeded in 2016.”

Attainment Status and Increments

As per 40 CFR §81.334 “Designation of Areas for Air Quality Planning Purposes” Johnston County is in attainment of the National Ambient Air Quality Standards (NAAQS).

The minor PSD Baseline dates for Johnston County has been triggered for PM₁₀ and SO₂ emissions. There are no emissions of such pollutants due to this renewal.

Compliance Status

The facility has received several notices of violation in the past ten years the most recent being February 20, 2018. The violations were related to late reporting, incomplete annual compliance certification, failing to

perform recordkeeping, non-compliance with Title V monitoring, record keeping, or reporting requirements and late annual reporting and exceeding 10 tpy of a single HAP.

However, the report for the latest inspection done on 03/28/2017, by Mr. Matthew Mahler, of the Regional Office states that the facility “was in compliance with all applicable air regulations and permit stipulations.”

VI. Consistency Determination, Comments, and Recommendations

A zoning consistency determination is not required for this renewal.

A professional engineer’s seal is not required for this modification.

The Regional Office, the applicant, and the SSCB (Stationary Source Compliance Branch) were provided a copy of the modified draft permit for this application for their comments and their comments taken into consideration.

The applicant and the Regional Office had no comments.

VII. Table of changes:

Table of changes made in Air Quality Permit No. 07357T07

Page(s)	Section	Description of Change(s)
5	2.1 A. 2. c. iii.,	Added language for painting operations (ID Nos. ES-PO1 and ES-PO2) with associated panel filters (ID Nos. CD-PF-1 and CD-PF-2) to be in noncompliance with 02D .0521 if the above-normal emissions are not corrected and demonstrate emissions are below limit.
5-6	2.1 A. 2. e.,	Added reporting requirements for painting operations (ID Nos. ES-PO1 and ES-PO2) with associated panel filters (ID Nos. CD-PF-1 and CD-PF-2) to be in compliance with 02D .0521
19	2.1 B. 2. c. ii.,	Changed the filters inspection frequency from weekly to monthly inspections for the metalizing operations (ID Nos. ES-MO1 and ES-MO2) with associated panel filter (ID No. CD-PF-3) for compliance with 2D .0515
20-21	2.1 B. 2. e.,	Added reporting requirements for the metalizing operations (ID Nos. ES-MO1 and ES-MO2) with associated panel filter (ID No. CD-PF-3) for compliance with 2D .0521
22	2.1 C. 2. c. iii.,	Added language for outdoor sandblasting operation (ID No. ES-OSBO) to be in noncompliance with 02D .0521 if the above-normal emissions are not corrected and demonstrate emissions are below limit.
	Permit No. 07357T06 22. A. 1. – (Removed)	Removed Work practice standards for Volatile organic compounds emissions as required by 15A NCAC 2D .0958
	Permit No. 07357T06 22. A. 2. – (Removed)	Removed Last MACT/Air toxics demonstration as required by 15A NCAC 2Q .0705

Page(s)	Section	Description of Change(s)
5	2.1 A. 2. c. iii.,	Added language for painting operations (ID Nos. ES-PO1 and ES-PO2) with associated panel filters (ID Nos. CD-PF-1 and CD-PF-2) to be in noncompliance with 02D .0521 if the above-normal emissions are not corrected and demonstrate emissions are below limit.
25 through 34	General Conditions	Updated